

**K** is a point on the keel on the centre line of the vessel

**B** is the point at which all buoyant forces act up.

**G** is the point at which all weight forces act down

The intersection of the verticals through **B** at 2 consecutive angles of heel is known has **M** (metacentre)

**M** is considered to remain stationary up to angles 10 - 15º

The vertical distance between **B** & **M** is known has the metacentric radius **(BM) and = KM - KB**

The distance between **G** and **M** is the metacentric height

**GM** is considered to be a measure of initial transverse stability due to its relationship with the righting moment which restores the ship to the upright condition